AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A method for forming a capacitor in a semiconductor device, comprising:

forming a lower electrode constituted with a silicon ~~oxide~~ layer on a semiconductor substrate by a predetermined process on which a predetermined process has been completed;

forming a uniform silicon oxide layer on the lower electrode by performing an atomic layer deposition (ALD) process;

forming an aluminum oxide (Al_2O_3) film on the silicon oxide layer by using an ALD method, wherein the method for forming the uniform silicon oxide layer and the aluminum oxide film ~~to~~ reduces incubation time required for the formation of the Al_2O_3 film on the silicon oxide layer and ~~to remove~~ prevents metallic clusters from ~~formed~~ forming at an interface between the Al_2O_3 film and the silicon oxide layer; ~~and~~

crystallizing the Al_2O_3 film by carrying out a heat treatment process, and

forming an upper electrode on the Al_2O_3 film, wherein the upper electrode includes multi-layers of a polysilicon layer and a metal layer.

Claim 2 (Canceled)

Claim 3 (Original): The method as recited in claim 1, wherein the silicon oxide layer is formed by using an in-situ method or an ex-situ method.

Claim 4 (Original): The method as recited in claim 1, wherein a silicon source selected from a group consisting of $SiCl_4$, DCS and HCD and a reaction source selected from a group consisting of H_2O, O_3 and H_2O_2 are used to form the silicon oxide layer during the ALD process.

Claim 5 (Original): The method as recited in claim 4, wherein a pyridine acting as a catalyst is used when the silicon source and the reaction source are supplied during the ALD process.

Claim 6 (Original): The method as recited in claim 4, wherein each of a supply time and a purge time for the silicon source and the reaction source is less than 10 seconds respectively.

Claim 7 (Previously Presented): The method as recited in claim 1, wherein the silicon oxide layer is formed at a low temperature less than about 200 °C.

Claim 8 (Original): The method as recited in claim 7, wherein a thickness of the silicon oxide layer is less than about 10 Å.

Claim 9 (Canceled)

Claim 10 (Previously Presented): The method as recited in claim 1, wherein Al $(CH_3)_3$, which is trimethylaluminum (TMA), is used as an aluminum source, and one of H_2O, O_3 and H_2O_2 is used as a reaction source during the ALD process to form the Al_2O_3 film.

Claim 11 (Previously Presented): The method as recited in claim 10, wherein a plasma is used as an energy source during the ALD process to form the Al_2O_3 film.

Claim 12 (Previously Presented): The method as recited in claim 11, wherein the ALD process to form the Al_2O_3 film is carried out at a room temperature or at a temperature of about 500 °C.

Claim 13 (Previously Presented): The method as recited in claim 1, wherein a thickness of the Al_2O_3 film is less than about 100 Å.

Claim 14 (Original): The method as recited in claim 1, wherein the heat treatment process is carried out at a temperature greater than 600 °C and in an N_2 or O_2 ambient.

Claim 15 (Original): The method as recited in claim 14, wherein the heat treatment process is carried out by using a furnace annealing process or a rapid thermal process (RTP).

Claim 16 (Original): The method as recited in claim 1, wherein an upper electrode constituted with a metal layer, a silicon layer or a metal layer/silicon layer is formed on an upper area of the crystallized Al_2O_3 film.

Claim 17 (New): The method as recited in claim 1, wherein the silicon layer includes one of an undoped polysilicon layer, and a doped amorphous silicon layer.